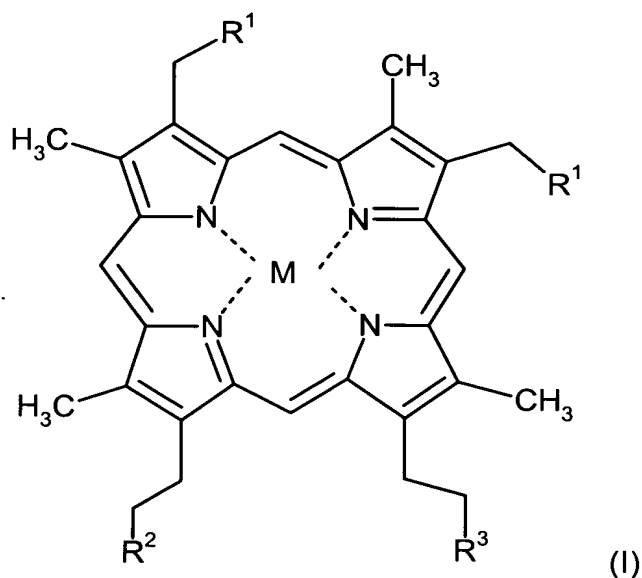


This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

**1. (Currently Amended)** A method for treatment or prophylaxis of radical-mediated cell injuries, comprising administering to a patient in need thereof Use of a porphyrin complex that ~~comprises~~ consists of a ligand of general formula I



as well as at least one ion of an element of atomic numbers 20-32, 37-39, 42-51 or 57-83,  
wherein in which

M stands for a paramagnetic ion,

R<sup>1</sup> stands for a hydrogen atom, for a straight-chain C<sub>1</sub>-C<sub>6</sub>-alkyl radical, for a C<sub>7</sub>-C<sub>12</sub>-  
aralkyl radical or for a group OR', wherein in which

R' is a hydrogen atom or a C<sub>1</sub>-C<sub>3</sub>-alkyl radical,

R<sup>2</sup> stands for R<sup>3</sup>, a group -CO-Z or a group -(NH)<sub>0</sub>-(A)<sub>q</sub>-NH-D, wherein in which

A means a phenylenoxy group or a C<sub>1</sub>-C<sub>12</sub>-alkylene group or a C<sub>7</sub>-C<sub>12</sub> aralkylene group that is interrupted by one or more oxygen atoms,

D means a hydrogen atom or a group  $-\text{CO}-\text{A}-(\text{COOL})_o-(\text{H})_m$ , with  $m$  equal to 0 or 1, provided that the sum of  $m$  and  $o$  is equal to 1,

wherein ~~in which~~ Q stands for an oxygen atom or for two hydrogen atoms,

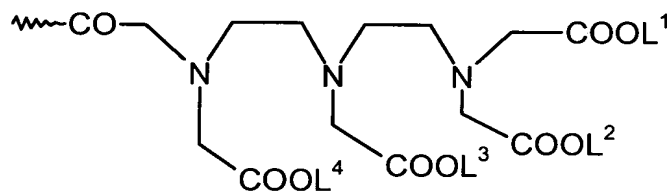
K means a complexing agent of general formula (IIa), (IIb), (IIc), (IId) or (IIE),

same meaning as  $R^4$ , and  $R^5$ , for the case that  $K$  is a complexing agent of formula

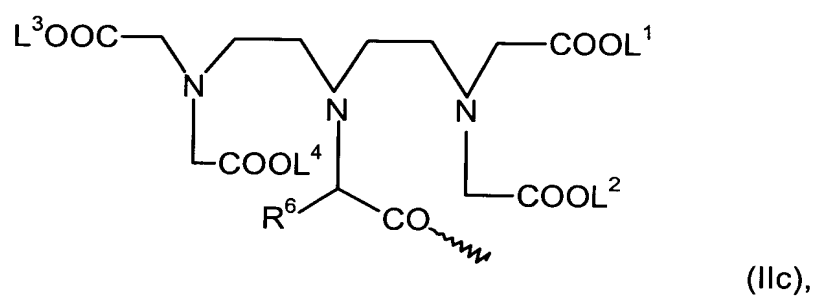
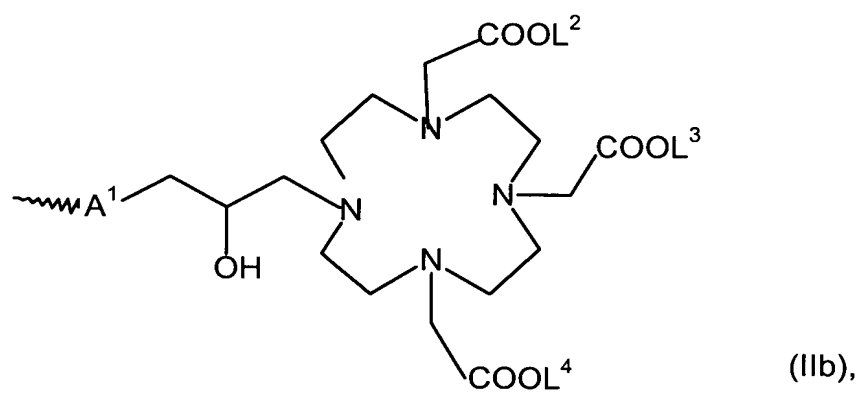
(IIb), (IIc), (II d) or (II e), has the same meaning as D,

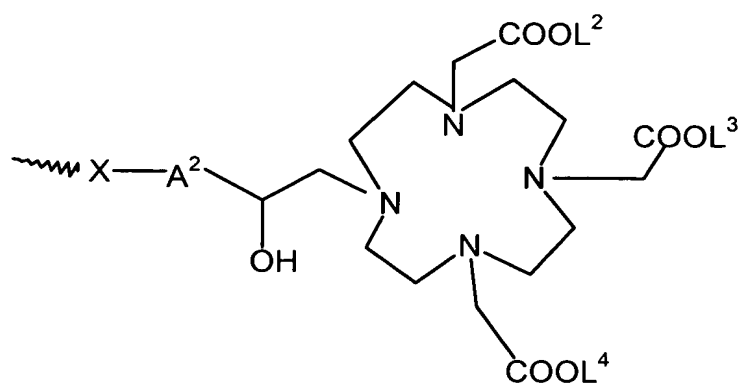
provided that a direct oxygen-nitrogen bond is not allowed,

and K stands for a complexing agent of general formula (IIa), (IIb), (IIc), (IId), (IIe) or (IIf)

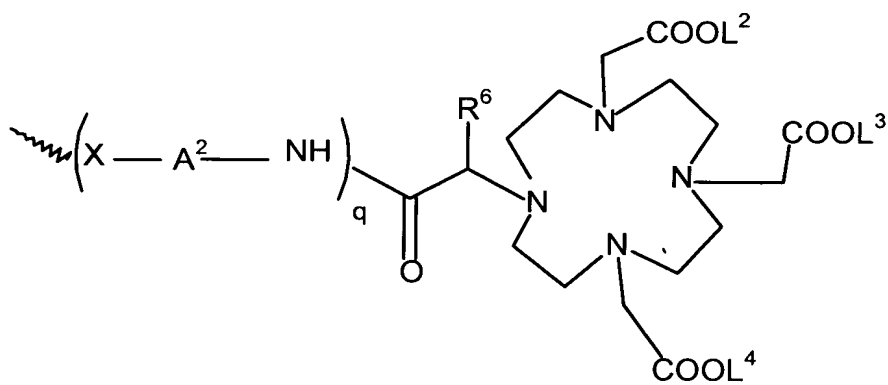


(IIa)

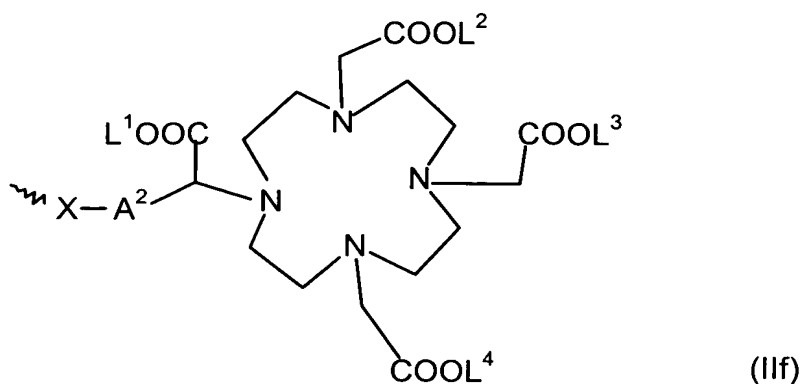




(IId),



(IIe),



wherein ~~in which~~

~~q~~ — has the above indicated meaning,

A<sup>1</sup> has the meaning that is indicated for A,

R<sup>6</sup> stands for a hydrogen atom, a straight-chain or branched C<sub>1</sub>-C<sub>7</sub>-alkyl group, a phenyl group or a benzyl group,

A<sup>2</sup> stands for a phenylene-, -CH<sub>2</sub>-NHCO-CH<sub>2</sub>-CH (CH<sub>2</sub>COOH) -C<sub>6</sub>H<sub>4</sub>-β-, -C<sub>6</sub>H<sub>4</sub>-O-(CH<sub>2</sub>)<sub>0-5</sub>-β, ~~or~~ -C<sub>6</sub>H<sub>4</sub>-(OCH<sub>2</sub>CH<sub>2</sub>)<sub>0-1</sub>-N(CH<sub>2</sub>COOH)-CH<sub>2</sub>-β group, or a C<sub>1</sub>-C<sub>12</sub>-alkylene group ~~or a C<sub>7</sub>-C<sub>12</sub>-alkylene group~~ that is optionally interrupted by one or more oxygen atoms, 1 to 3 -NHCO groups, or 1 to 3 -CONH groups, and/or substituted with 1 to 3 (CH<sub>2</sub>)<sub>0-5</sub>COOH ~~(CH<sub>2</sub>)<sub>0-5</sub>COOH~~ groups, whereby β stands for the binding site to X,

X stands for a -CO- or -NHCS- ~~NHCS-~~ group, and

L<sup>1</sup>, L<sup>2</sup>, L<sup>3</sup> and L<sup>4</sup>, independently of one another, stand for a hydrogen atom or a

metal ion equivalent of an element of the above-mentioned atomic

number, provided that at least two of these substituents stand for metal ion

equivalents and that other anions are present to compensate for optionally

present charges in the metalloporphyrin, and wherein, ~~in which~~ free carboxylic acid

groups that are not required for complexing can also be present as salts with

physiologically compatible inorganic and/or organic cations or as esters or as amides, for the production of a pharmaceutical agent for treatment and prophylaxis of radical-mediated cell injuries.

2. (Canceled)

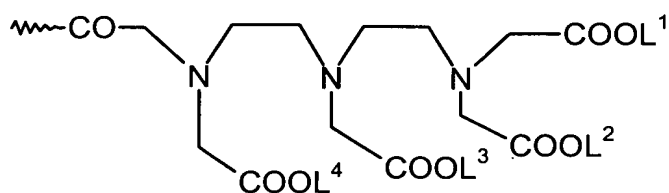
3. (Canceled)

4. (Currently Amended) A method Use of the porphyrin complexes of general formula I according to claim 1, characterized in that wherein M stands for an  $\text{Fe}^{3+}$ ,  $\text{Mn}^{3+}$ ,  $\text{Cu}^{2+}$ ,  $\text{Co}^{3+}$ ,  $\text{VO}^{2+}$   $\text{VO}^{2+}$ ,  $\text{Cr}^{3+}$  or  $\text{Ni}^{2+}$  ion.

5. (Currently Amended) A method Use of the porphyrin complex compounds of general formula I according to claim 1 wherein  $\text{R}^2$  and  $\text{R}^3$ , independently, in each case stand for a  $-\text{CONHNHK}$ ,  $-\text{CONH}(\text{CH}_2)_2\text{NHK}$ ,  $-\text{CONH}(\text{CH}_2)_3\text{NHK}$ ,  $-\text{CONH}(\text{CH}_2)_4\text{NHK}$ , or  $-\text{CONH}(\text{CH}_2)_2\text{O}(\text{CH}_2)_2\text{NHK}$  group.

6. (Currently Amended) A method Use of the porphyrin complexes according to claim 1, wherein  $\text{R}^2$  and  $\text{R}^3$ , independently, in each case stand for a  $-\text{CONHNHK}$  group.

7. (Currently Amended) A method Compounds according to claim 1 6, wherein K is a complexing agent of general formula (IIa)



**8. (Currently Amended)** A method according to Use of the porphyrin complex compounds according to formula 1 of claim 1, wherein the porphyrin complex is namely  
 {mu-[{ 16,16'-[Chloromanganese(III)-7,12-diethyl-3,8,13,17-tetramethylporphyrin-2,18-diyl]-bis[3,6,9-tris(carboxymethyl)-11,14-dioxo-3,6,9,12,13-pentaazahexadecanoato]}(8-))} digadolinato(2-), -disodium,

{mu[{ 16,16'-[chloroiron(III)-7,12-diethyl-3,8,13,17-tetramethylporphyrin-2,18-diyl]-bis[3,6,9-tris(carboxymethyl)-11,14-dioxo-3,6,9,12,13-pentaazahexadecanoato]}-(8-))}-digadolinato(2-), -disodium, or

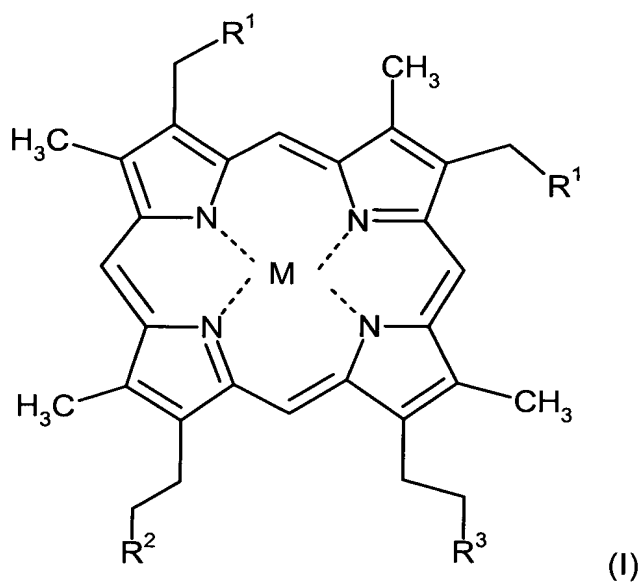
{mu[{ 16,16'-[copper(II)-7,12-diethyl-3,8,13,17-tetramethylporphyrin-2,18-diyl]-bis[3,6,9-tris(carboxymethyl)-11,14-dioxo-3,6,9,12,13-pentaazahexadecanoato]}(8-))}-digadolinato(2-), -disodium.

**9. (Canceled)**

Please add the following new claims:

--10. (New) A pharmaceutical composition, comprising:

a porphyrin complex of formula I



as well as at least one ion of an element of atomic numbers 20-32, 37-39, 42-51 or 57-83,  
wherein

M stands for a paramagnetic ion,

R<sup>1</sup> stands for a hydrogen atom, for a straight-chain C<sub>1</sub>-C<sub>6</sub>-alkyl radical, for a C<sub>7</sub>-C<sub>12</sub>-  
aralkyl radical or for a group OR', wherein

R' is a hydrogen atom or a C<sub>1</sub>-C<sub>3</sub>-alkyl radical,

R<sup>2</sup> stands for R<sup>3</sup>, a group -CO-Z or a group -(NH)<sub>o</sub>-(A)<sub>q</sub>-NH-D, wherein

Z is a group -OL, with L meaning an inorganic or organic cation or a C<sub>1</sub>-C<sub>4</sub>-  
alkyl radical,

A means a phenylenoxy group or a C<sub>1</sub>-C<sub>12</sub>-alkylene group or a C<sub>7</sub>-C<sub>12</sub>



aralkylene group that is interrupted by one or more oxygen atoms,  
 o and q, independently of one another, mean the number 0 or 1, and  
 D means a hydrogen atom or a group  $-\text{CO}-\text{A}-(\text{COOL})_o-(\text{H})_m$ , with m equal

to 0 or 1, provided that the sum of m and o is equal to 1,

$\text{R}^3$  stands for a group  $-(\text{C}=\text{Q})(\text{NR}^4)_o-(\text{A})_q-(\text{NR}^5)-\text{K}$ ,

wherein Q stands for an oxygen atom or for two hydrogen atoms,

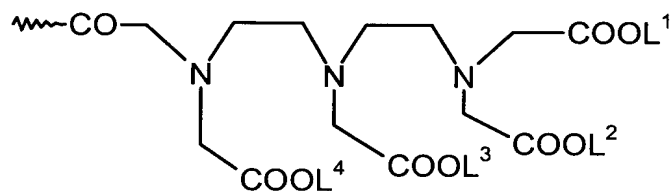
$\text{R}^4$  means a group  $-(\text{A})_q-\text{H}$ , and

K means a complexing agent of formula (IIa), (IIb), (IIc), (IIe) or (IIf), whereby

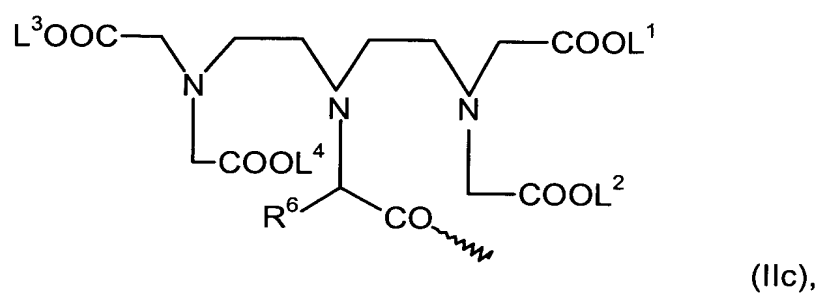
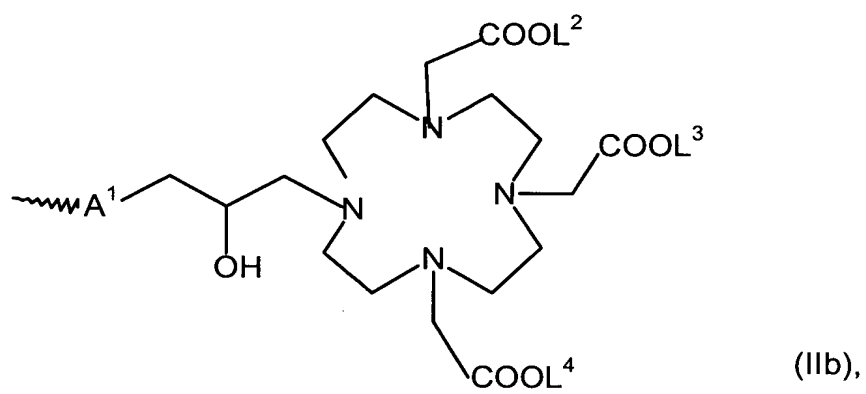
$\text{R}^5$ , for the case that K is a complexing agent of formula (IIa), has the same meaning as  $\text{R}^4$ , and  $\text{R}^5$ , for the case that K is a complexing agent of formula (IIb), (IIc), (IIe) or (IIf), has the same meaning as D,

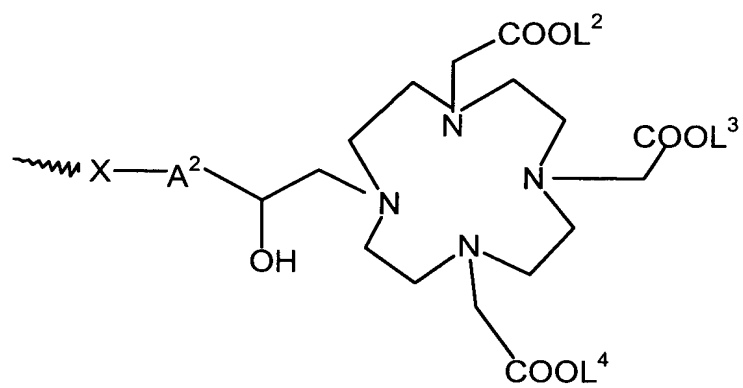
provided that a direct oxygen-nitrogen bond is not allowed,

and K stands for a complexing agent of formula (IIa), (IIb), (IIc), (IIe) or (IIf)

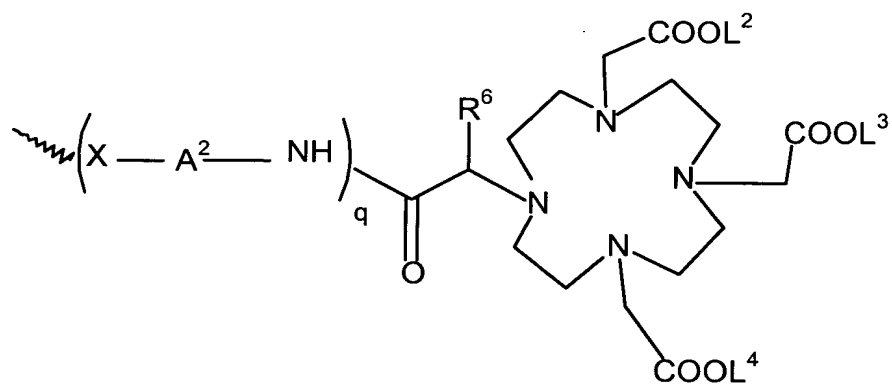


(IIa)

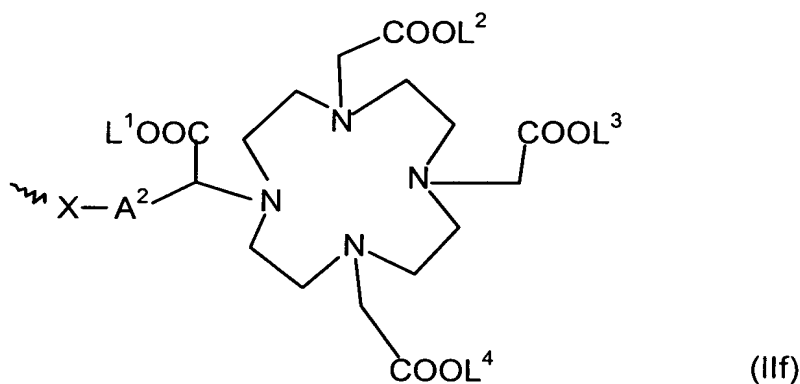




(IId),



(IIe),



wherein

$A^1$  has the meaning that is indicated for A,

$R^6$  stands for a hydrogen atom, a straight-chain or branched  $C_1$ - $C_7$ -alkyl group, a phenyl group or a benzyl group,

$A^2$  stands for a phenylene-,  $-\text{CH}_2\text{-NHCO-CH}_2\text{-CH}(\text{CH}_2\text{COOH})-\text{C}_6\text{H}_4\text{-}\beta$ -,  $-\text{C}_6\text{H}_4\text{-O-(CH}_2\text{)}_{0.5}\text{-}\beta$ ,  $-\text{C}_6\text{H}_4\text{-(OCH}_2\text{CH}_2\text{)}_{0.1}\text{-N(CH}_2\text{COOH)-CH}_2\text{-}\beta$  group, or a  $C_1$ - $C_{12}$ -alkylene group that is optionally interrupted by one or more oxygen atoms, 1 to 3  $-\text{NHCO}$  groups, or 1 to 3  $-\text{CONH}$  groups, and/or substituted with 1 to 3  $(\text{CH}_2)_{0.5}\text{COOH}$  groups, whereby  $\beta$  stands for the binding site to X,

X stands for a  $-\text{CO-}$  or  $-\text{NHCS-}$  group, and

$L^1$ ,  $L^2$ ,  $L^3$  and  $L^4$ , independently of one another, stand for a hydrogen atom or a metal ion equivalent of an element of the above-mentioned atomic number, provided that at least two of these substituents stand for metal ion equivalents and that other anions are present to compensate for optionally present charges in the metalloporphyrin, and wherein, free carboxylic acid groups that are not required for complexing can also be present as salts with physiologically compatible inorganic and/or organic cations or as esters or as

amides, and a pharmaceutically acceptable carrier.

**11. (New)** A method according to claim 1, wherein an effective amount of the porphyrin complex is provided to bind peroxynitrite in the body.

**12. (New)** A pharmaceutical composition according to claim 10, wherein an effective amount of the porphyrin complex is provided to bind peroxynitrite in a body.

**13. (New)** A method of treating or preventing a disease caused by peroxynitrite-mediated reactions weakened and/or treated by the increase in the conversion rate of peroxynitrite, comprising administering an effective amount of a pharmaceutical composition according to claim 10.

**14. (New)** A method of treating or preventing an ischemic reperfusion disease, sepsis, chronic or acute inflammation, adult respiratory stress syndrome, cancer, bronchio-pulmonary dysplasia, cardiovascular disease, diabetes, multiple sclerosis, Parkinson's disease, familial amyotrophic lateral sclerosis or colitis, or a special neuronal disease, comprising administering an effective amount of a pharmaceutical composition according to claim 10 to a patient in need thereof.

**15. (New)** A method of treating or preventing a stroke, a head trauma, a myocardial ischemia, an arthritis, or an inflammatory intestinal disease comprising administering an effective amount of a pharmaceutical composition according to claim 10 to a patient in need thereof.

**16. (New)** A method of diagnosing an ischemic reperfusion disease, an acute or a chronic inflammatory disease, an autoimmune disease, a neurodegenerative disease or a neuroregenerative disease comprising administering an effective amount of a pharmaceutical composition according to claim 10 to a patient in need thereof.

**17. (New)** A composition according to claim 10, wherein the porphyrin complex is suspended or dissolved in an aqueous medium.--